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Montana Christmas Tree Production Highest on Record

By

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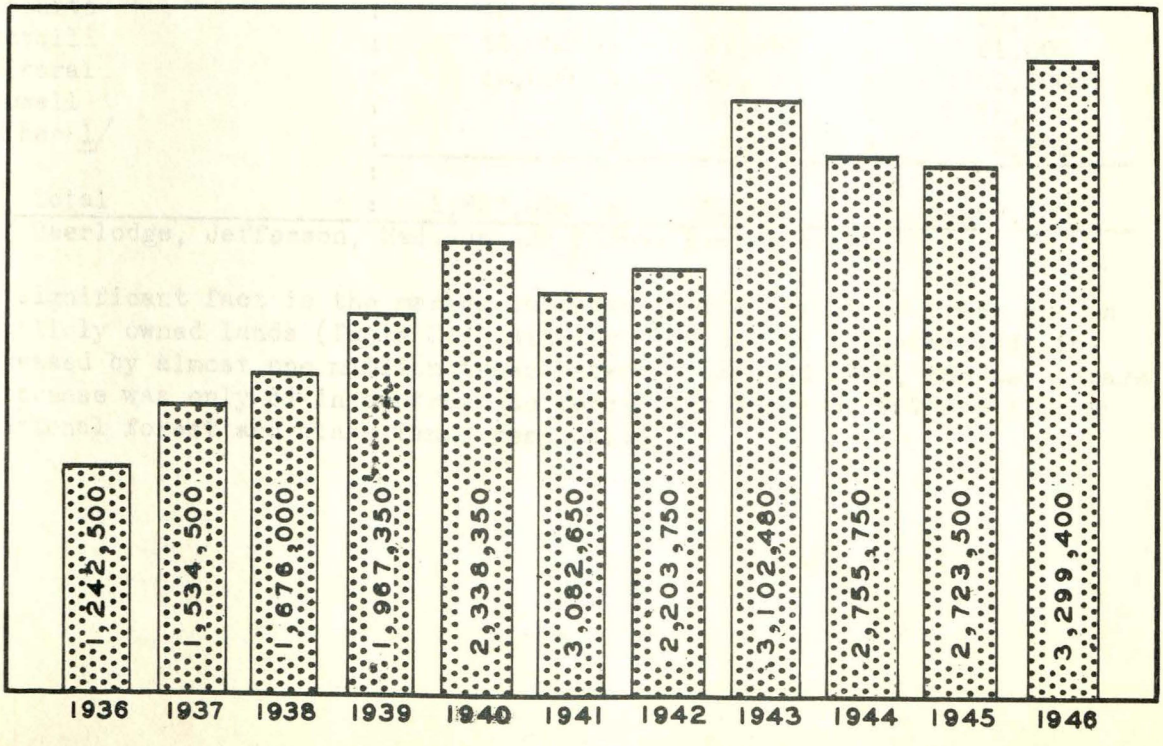
The number of Christmas trees harvested in Montana reached a new high in 1946. Approximately 3,300,000 trees were cut. This is more than two and one-half times the number of trees cut ten years ago and 6 percent more than the previous peak year of 1943 (Figure 1). Although frequent fall rains delayed cutting and interfered with hauling, the all-time high in consumer demand, favorable cost-price differentials and an easing of labor shortages combined to greatly stimulate production in the first postwar year.

Lincoln County in northwestern Montana was the leading producing area. Nearly 1.4 million trees were cut in this county alone (Table 1). Flathead County, adjacent to Lincoln, was second, reporting a cut of 1.2 million trees. These two counties made up almost 80 percent of the total number of trees cut in Montana and represent one of the largest Christmas tree producing areas in the United States.

NUMBER OF CHRISTMAS TREES CUT - 1936 - 1946
MONTANA



Montana trees were shipped to all sections of the country; east to Pennsylvania, south to Texas and west to the coast. The principal buying area, however, was the upper Mississippi Valley including the states of Illinois, Iowa and Missouri. Some trees were even shipped to Minnesota and Wisconsin, one of the other principal Christmas tree producing areas in the country. Other states receiving large shipments were North Dakota, Nebraska, Kansas, Oklahoma, Louisiana and Indiana. The number of trees shipped by railroad was slightly more than in 1945 but less than in 1943. In comparison truck shipments were 2.5 times greater than last year and the highest of any year yet recorded. On a percentage basis of the number of trees shipped each year, rail shipments dropped from a total of 94 percent in 1938 to 87 percent in 1946, the sharpest drop being from 1945 to 1946. This is explained in part by the shortage of freight cars, the release of trucks from the more essential jobs they were doing during the war period, to the strong demand for trees in adjacent states and the promise of high profits from return loads of other commodities.

Table 1 - Christmas Tree Shipments by Counties in 1946
Montana

County	Rail Shipments	Truck Shipments	Total Shipments
	(Number of Trees)		
Lincoln	1,300,000	68,400	1,368,400
Flathead	1,050,000	174,000	1,224,000
Lake	240,000	6,000	246,000
Sanders	125,000	6,800	131,800
Missoula	52,000	75,000	127,000
Granite	45,000	17,500	62,500
Ravalli	40,000	21,000	61,000
Mineral	15,000	45,000	60,000
Powell		15,800	15,800
Other 1/		2,900	2,900
Total	2,867,000	432,400	3,299,400

1/ Deerlodge, Jefferson, Madison and Silver Bow Counties.

A significant fact is the marked increase in the number of trees cut on publicly owned lands (Table 2). Although the cut on private lands increased by almost one million trees between 1938 and 1946, the percentage increase was only 64 in contrast to percentage gains of 267 and 1767 on national forest and state lands respectively.

Table 2 - Cut of Christmas Trees by Land Ownership

Ownership	Number of Trees Cut				Increase	
	1938		1946		1938 - 1946	
	Thousands	Percent	Thousands	Percent	Thousands	Percent
Private	1520	91	2501	76	981	64
National Forest	141	8	518	16	377	267
State	15	1	280	8	265	1767
All	1676	100	3299	100	1623	97

There are various reasons why the cutting of Christmas trees is increasing at a faster rate on public lands than on private lands. It is not a result of an increase in acreage of public lands because there has been no significant change in ownership. The most important probable cause is that cutting on accessible private lands is reaching the limit of supply. Hence new Christmas tree operators must turn to public lands which on the average are less accessible. The annual cut by individual national forests is shown in Table 3.

Considerable of the young second-growth Douglas-fir which is suitable for Christmas tree cutting has been thoroughly culled for this class of material, or has grown out of size. It is unlikely that an annual cut of three million trees can be continued for long unless special measures are taken to manage the stands for Christmas trees.

Production of Christmas trees is a worthwhile enterprise for owners of small second-growth Douglas-fir timber. It offers a cash income from timber stands which will not bear other merchantable products for much longer periods. Harvests can be made annually or at intervals of only a few years. Christmas tree production also offers employment at good pay during a season after the major farm crops have been harvested.

Foresters suggest several methods for maintaining a high rate of production. The most important are as follow:

1. Cut the stump high enough to leave several thrifty branches which will grow one or more new tops. Frequently it is necessary to cut out all but one or two of the new tops after a lapse of 3 or 4 years in order to produce well-formed trees. A single stump managed in this way will produce several trees in succession. The maximum number is now known. Do not leave live stumps if there are nearby trees which will crowd.

2. Thin out thickets to a spacing that will permit the development of symmetrical crowns. Leave trees that differ in size and allow for the additional thinning that will result from future cutting of Christmas trees.

3. Maintain a set of roads and skid trails that will permit orderly and systematic harvesting.

4. Do not cut too heavily. Keep plenty of growing stock.

Other measures which will also help to get maximum yields are (1) reserve a scattering of older trees for seed production and protection on severe exposures, (2) prune lower branches from thin-topped or badly formed trees to give light and space to smaller neighbor trees, and (3) plant trees in openings to maintain full stocking.

The annual yield of Christmas trees which can be produced on managed areas, by using the various practices mentioned above, will vary greatly. The species composition, density of stocking, and sizes of the trees in the stand, past cutting, the growth quality of the soil for Christmas trees, and the intensity of management will all affect the yield. The wild trees from which most Christmas trees are cut frequently are 40 years or more in age. First cuttings seldom yield more than 200 trees per acre and the average is much less. Two to four successive cuttings can be made at intervals of several years before the stands become seriously depleted. The later cuttings are likely to give smaller yields.

Under management, Christmas trees can be grown in 15 to 20 years - or less if a large proportion of 4-foot trees are produced, and growth from turned-up branches on stumps is successfully conducted. It is believed that reasonably well-stocked areas of young second-growth can produce 40 to 50 trees per acre per year if conservatively managed. Higher yields are possible, theoretically.

Table 3 - Christmas Trees Cut on National Forests
Montana

National Forests	1938	1940	1942	1944	1946
			(Number of Trees)		
Kootenai	116,533	243,017	161,550	306,761	438,849
Flathead	11,332	2,769	9,160	84,513	45,645
Bitterroot	12,523	1,172	11,890	21,208	20,126
Beaverhead	-	-	-	-	6,190
Cabinet	-	338	3,376	8,152	3,773
Gallatin	-	-	-	-	1,418
Lolo	288	34,684	644	-	1,284
Lewis & Clark	-	-	-	-	300
Helena	-	-	-	-	100
Total	140,676	281,980	186,620	420,634	517,685